

App. No. 10/810,120
Amendment Dated: August 12, 2005
Reply to Office Action of May 12, 2005

REMARKS

Claims 1 - 20 are pending in this application. Claims 1 - 5 are rejected under 35 U.S.C. § 112, second paragraph. Claims 1 - 2, 5 - 9, 15 - 16 and 18 - 20 are rejected under 35 U.S.C. § 102(b). Claim 19 is rejected under 35 U.S.C. § 103(a). Claims 3 - 4, 10 - 14 and 17 are objected to, but contain allowable subject matter. Claims 1, 3 and 6 are amended. Claim 4 is cancelled. New claims 21 and 22 are added, but no new matter has been added. In view of the amendments and the following remarks, reconsideration and allowance of all pending claims are respectfully requested.

Allowable Subject Matter

The office action indicated that claims 3 - 4 would be allowable if rewritten to overcome the rejection(s) under 35 USC § 112, 2nd paragraph. Namely, claims 3 and 4 are indicated to be allowable if rewritten in independent form and if the objections for antecedence are corrected. Claims 10-14 and 17 are objected to as being depending from a rejected base claim, but would be allowable if rewritten in independent form.

Applicants thank the Examiner for identifying the allowable subject matter. Claim 3 is amended to include the limitations recited in claims 1 and 2. Claim 1 is amended to include the limitations from claim 4, which is now cancelled. It is believed that claims 1-3 and 5 are now in proper form for allowance and notice to that effect is solicited.

Claim Objections

Claims 1 - 5 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Namely, claim 1 recites "the resistor circuit" and claim 3 recites "the first amplifier", which both lack proper antecedent basis. Claims 1 and 3 are amended and now believed to be in proper form for allowance. Claims 2 and 5 depend upon and further limit claim 1 and are also believed to be in proper form for allowance.

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Claim Rejections under 35 U.S.C. § 102(b)

Claims 1 - 2, 5 - 9, 15 - 16 and 18 - 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,456,051 to Darzy.

Claims 1 and 3 are amended in accordance with the recommendations of allowable subject matter presented in the present office action. Claims 2 and 5 depend upon and further limit claim 1 and are believed to be in proper form for allowance. Claim 4 is cancelled. The rejection of claims 1 - 5 under 35 U.S.C. § 102(b) is rendered moot by the amendments, and a notice of allowance for claims 1-3 and 5 is requested.

Claim 6 is amended to clarify that which is the invention, and not intended to create any additional limitation. Applicant's amended claim 6 includes at least the following limitation that are not found in the cited prior art references, namely:

" a first current source that is arranged to provide a first current, wherein the first current has a first level that is approximately constant, and wherein the first current source is controlled;

a first resistor circuit that is coupled between a common node and the first current source, wherein the first resistor circuit has an associated tap-point, wherein the first resistor circuit comprises at least a first resistor and a second resistor that are coupled together at the tap point."

"

The office action states that FIGURE 4 of the Darzy reference shows "a first current source 80 [sic], a first resistor circuit (R1) has an associated rap point (VMD)." It is well understood in the art that a tap point in a resistor circuit is juxtaposed between two or more resistive elements. Applicant has amended claim 6 to reflect this well understood concept to reduce any confusion that might exist. Since resistor R1 from Darzy's FIGURE 4 does not have a tap-point as is understood in the art, resistor R1 from FIGURE 4 does not meet the limitations described in Applicant's claim 6. Moreover, FIGURE 4 of Darzy does not describe the current source (presumed to be current source 8 from FIGURE 4) as controlled such that "the first current has a first level that is approximately constant", as is found in Applicant's claim 6.

Since Applicant's claim 6 includes limitations not found in the cited references, it is respectfully solicited that Applicant's claim 6 is allowable. Claims 7 - 14 depend upon and further limit Applicant's claim 6, and are believed to be in proper form for allowance. Regarding claim 7, comparator 28 in Darzy intentionally has an offset to compensate for the voltage drop in

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resistor RS during a short-circuit condition (see col 4, lines 55 - 56). This contradicts Applicant's claim 7. Regarding claim 8, element 30 in FIGURE 4 is not an amplifier as described in Applicant's claim. Instead, element 30 is a comparator (e.g., see col. 3, line 16). Regarding claim 9, element 34 is not a second current source as is found in Applicant's claim 9. Instead, element 34 is a simple resistor.

For at least the reasons stated above, Applicant's claim 6 - 14 are believed to be in proper form for allowance and notice to that effect is respectfully requested.

Claims 15-16, 18, and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by JP 5-336679. JP 5-336679 is written entirely in Japanese, and should have been provided with at least a partial translation to identify its relevance. Based upon the sole figure that is provided in the Japanese reference, the Applicant has determined, based upon reasonable assumptions, that the reference is inapplicable to Applicant's claimed 15 - 16, 18 and 20.

The following assumptions had to be made to apply any reasonable analysis of the Japanese reference. First, circuit block 4 must be a comparator since it appears to drive a clock input (CK) for circuit block 5. Second, circuit block 6 must be a digital-to-analog converter since it is labeled as "D/A". Third, the output (VA) of block 6 must be an analog voltage since the block is a digital-to-analog converter. Fourth, the input of block 6 must be a digital signal, since it is a digital-to-analog converter. Fifth, block 8 must be an amplifier since block 7 is comparing two voltages, and voltage VA is known to be an analog voltage, implying that voltage VB is also an analog quantity. Sixth, block 8 must be an amplifier that is amplifying a difference voltage since column 3 of the Japanese reference describes a set of equations as follows: $I = VR/R2$, and $VB = VR * R4/R3$. Lastly, the output voltage (OUT) is regulated to achieve a voltage corresponding to VREF since comparator 4 will continue to change the output of the D/A circuit (via block 5) until $VOUT = VREF$.

Applying these principals, to the best of Applicant's abilities illustrates that the reference does not teach at least "a comparator means" as is described in Applicant's claim 15. Regarding claim 16, Applicant requests more guidance since there is no FIGURE 3 as described in the Office Action. Regarding claim 20, block 8 is not a comparator, and there is nothing (at least identifiable by the Applicant) in the Japanese reference to suggest anything regarding offset

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as is described in Applicant's claim 20. Claims 16 - 20 depend upon and further limit claim 15, and are believed to be allowable for at least that reason, as well as those reasons described above. A notice of allowance is respectfully requested for claims 15 - 20.

Claim Rejections under 35 U.S.C. § 103(a)

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 5-336679. In order to maintain a rejection under 35 U.S.C. § 103(a), each limitation must be found in the references. For the reasons stated previously, Claim 15 is believed to include limitations not found in the Japanese reference. Since claim 19, depends from claim 15, it is believed to be allowable for at least that reason, and notice to that effect is requested.

New Claims

New claims 21 and 22 are added, and are fully supported by Applicant's application and claims as originally filed. It is believed that no new search is required for proper consideration and allowance of new claims 21 and 22 is requested.

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CONCLUSION

In view of the foregoing remarks, all pending claims are believed to be allowable for at least the reasons stated above and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for Applicants at the telephone number provided below.

Respectfully submitted,

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